Substitute for Form 1449A/PTO (Modified)

Sheet

1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of

5

Com	plete if Known	(O.F.)
Application Number	09/773,322	71 - vo)
Filing Date	January 30, 2001	7000
First Named Inventor:	Keith et al.	oct 2 8 100 5
Group Art Unit	2621	, sal
Examiner Name	Tran, P.	ENT & TRADER
Attorney Docket Number	74451.P041X2D2	

		-				11000
				U.S. PATENT DOCUMENTS		
Exam. Initial*	Cite No. ¹	U.S. Patent		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant
		Number Code ²	Kind (If known)		MM-DD-YYYY	Passages or Relevant Figures Appear
	Α	4985927		Norwood et al.	01/15/1991	- Igailos Appodi
	В	4987480		Lipmann et al.	01/22/1991	
	С	5000183		Bonnefous	03/19/1991	
	D	5001764		Wood et al.	03/19/1991	
	Е	5014134		Lawton et al.	05/07/1991	
	F	5018210		Merryman et al,	05/21/1991	
	G	5068911		Resnikoff et al.	11/26/1991	
	Н	5073964		Resnikoff	12/17/1991	
		5095447		Manns et al.	03/10/1992	DECENT
	J	5101446		Resnikoff et al.	03/31/1992	RECEIVED
	K	5103306		Weiman et al.	04/07/1992	007.04
	L	5121191		Cassereau et al.	06/09/1992	OCT 3 1 2002
	M	5124930		Nicolas et al.		ohne!
	N	5128757		Citta et al.	07/07/1992	echnology Center 260
	0	5148498		Resnikoff et al.	09/15/1992	
	Р	5152953		Ackerman	10/06/1992	
	Q	5156943		Whitney	10/20/1992	
	R	5173880		Duren et al.	12/22/1992	
	S	5420891		Akansu	05/30/1995	
	T	3580655		Leith et al.	05/25/1971	

Exam.	Cite	Fore	eign Patent Document	OREIGN PATENT DOCUME			
Initial*	No.1	Office ³	Number ⁴ Kind Code ⁵ (If known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	U	wo	9423385		10/13/1994	3	<u> </u>
<u> </u>	V	EP	0622741		03/30/1994		
	W	UK	2284121		05/24/1995		┢
	X	WO	9609718		03/28/1996		\vdash
	Υ	WO	9519683		07/20/1995		├
	Z	EP	0701375		03/13/1996		├-
	AA	UK	2211691		07/05/1989		├

Examiner		Date Considered	
Signature	i	Date Considered	
Orgillature			1

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Substitute for Form 1449A/PTO (Modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Com	OE	
Application Number	09/773,322	(1, - 2)
Filing Date	January 30, 2001	a min
First Named Inventor:	Keith et al.	aci 2
Group Art Unit	2621	, and
Examiner Name	Tran, P.	WENT & TRADE
Attorney Docket Number	74451 P041Y2D2	

Sheet	2		<u> of :</u>	5 Attorney Docket Num	ber 74451.P041	X2D2
				U.S. PATENT DOCUMENTS		
Exam. Cite Initial* No.1		U.S. Patent	Document	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant
	140.	Number Code ²	Kind (If known)	Grotion Booming	MM-DD-YYYY	Passages or Relevant Figures Appear
	BB	3950103		Schmidt-Weinmar	04/13/1976	
	CC	4136954		Jamieson	01/30/1979	
	DD	4223354		Noble et al.	09/16/1980	
Ì	EE	4599567		Goupillaud et al.	07/08/1986	
	FF	4663660		Fedele et al.	05/05/1987	
	GG	4701006		Perlmutter	10/20/1987	
	НН	4760563		Beylkin	07/26/1988	
	- II	4785349		Keith et al.	11/15/1988	7505
	JJ	4805129		David	02/14/1989	RECEIVED
	KK	4817182		Adelson et al.	03/28/1989	
	LL	4821223		David	04/11/1989	OCT 3 1 2002
	MM	4827336		Acampora et al.	05/02/1989 💂	hnology Center 260
``	NN	4829378		LeGall	05/09/1989	Chnology Center ac
	00	4837517		Barber	06/06/1989	1 31 00 UC 50
	PP	4864398		Avis et al.	09/05/1989	
	QQ	4897717		Hamilton et al.	01/30/1990	
	RR	4904073		Lawton et al.	02/27/1990	
	SS	4929223		Walsh	05/29/1990	
	TT	4936665		Whitney	06/26/1990	
	UU	4974187		Lawton	11/27/1990	
	VV	4982283		Acampora	1/1/1991	

	FOREIGN PATENT DOCUMENTS										
Exam. Initial*	Cite No. ¹	Foreiç Office	n Patent Docu Number ⁴ Code ⁵ known)		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T _€			
	WW	EP	0593013			04/20/1994					
	XX	EP	0510933			10/28/1992					
	YY	wo	8810049			12/15/1988					

F		
Examiner	Date Considered	
Signature		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Substitute for Form 1449A/PTO (Modified)

Sheet

3

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of

5

Con	plete if Known	(DE)
Application Number	09/773,322	THE VO
Filing Date	January 30, 200	1 8 MILL
First Named Inventor:	Keith et al.	001 2
Group Art Unit	2621	100
Examiner Name	Tran, P.	ENT & THADE
Attorney Docket Number	74451 P041X2I	

		· · · - · · · · · · · · · · · · · · · ·		Thursday Bocket Indi	Tibet 74451.P04	XZDZ
	T 60.	T 112 5		U.S. PATENT DOCUMENTS		
Exam. Initial*	Cite No.1	U.S. Patent	Document	Name of Patentee or Applicant	Date of Publication of	Pages, Columns, Lines
II II II CU	" 190.	Number	Kind	of Cited Document	Cited Document	Where Relevant
	1	Code ²	(If known)		MM-DD-YYYY	Passages or Relevant
	ZZ	4393456				Figures Appear
	AAA	4569075		Marshall, Jr.	07/12/1983	
	BBB		+	Nussbaumer	02/14/1986	
		4652881	 	Lewis	03/24/1987	
-	CCC	4674125	 	Carlson et al.	06/16/1987	
	DDD	4785348		Fonsalas et al.	11/15/1988	
	EEE	4799179		Masson et al.	01/17/1989	
	FFF	4815023		Arbeiter	03/21/1989	***************************************
	GGG	4839889		Gockler	06/13/1989	
	HHH	4868868		Yazu et al.	09/19/1989	ECEIVED
	111	4918524		Ansari et al.	04/17/1990	ALU
	JJJ	5049992		Citta et al.	09/17/1991	OCT 3 1 2002
	KKK	5072308		Lin et al.	12/10/1997	2002
	LLL	5097331		Chen et al.	03/17/1992	nology Center 2600
	MMM	5101280		Moronaga et al.	03/31/1992	a) ocure 5000
	NNN	5128791		LeGall et al.	07/07/1992	
	000	5182645		Breeuwer et al.	01/26/1993	
	PPP	5315670		Shapiro		
	QQQ	5321776		Shapiro	05/24/1994	
	RRR	5412741	 		06/14/1994	
	SSS	4155097	 	Shapiro	05/02/1995	
	300	7100001		Lux	05/15/1979	

	FOREIGN PATENT DOCUMENTS										
Exam. Initial*	Cite No. ¹	Forei Office ³	gn Patent Docum Number⁴ Kind (If k		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Te			
							у				
	-										

Examiner	D-4- C 11 1	
Signature	Date Considered	

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached. Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for Form 1449A/PTO (Modified) Complete if Known INFORMATION DISCLOSURE **Application Number** 09/773,322 Filing Date January 30, 2001 STATEMENT BY APPLICANT First Named Inventor: Keith et al. (use as many sheets as necessary) **Group Art Unit** 2621 **Examiner Name** Tran, P. Sheet 4 of 5 Attorney Docket Number 74451.P041X2D2 **U.S. PATENT DOCUMENTS** Exam. Cite U.S. Patent Document Name of Patentee or Applicant Date of Publication of Pages, Columns, Lines, Initial* No.1 of Cited Document **Cited Document** Number Where Relevant Kind Passages or Relevant Code² MM-DD-YYYY (If known) Figures Appear TTT 4190861 Lux 02/26/1980 UUU 5262958 Chui et al. 11/16/1993 VVV 5495292 Zhang et al. 02/27/1996

Technology Center 2600

Date Considered

				F	OREIGN PATENT DOCUMEN	TS		
Exam. Initial*	Cite No. ¹	Forei Office ³	gn Patent Docum Number⁴ Kind (If I	ent	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T _e
							garooyopou	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Examiner

Signature

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the twoletter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached. Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual

Substitute for Form 1449A/PTO (Modified) Complete if Known INFORMATION DISCLOSURE **Application Number** 09/773,322 Filing Date STATEMENT BY APPLICANT January 30, 2001 First Named Inventor: Keith et al. (use as many sheets as necessary) Group Art Unit 2621 **Examiner Name** Tran, P. Sheet 5 of 5 **Attorney Docket Number** 74451.P041X2D2 OTHER ART - NO PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Examiner Cite T^2 Initials* item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue No¹ number(s), publisher, city and/or country where published www 1977 IEEE International Conference on Acoustics Speech & Signal Processing, "Application of Quadrature Mirror Filters to Split Band Voice Coding Schemes", D. Esteban and C. Galand, pp. 191-195. Martin Vetterli, "Filter Banks Allowing Perfect Reconstruction", Signal Processing 10, XXX (1986), pp. 219-244. $\overline{Y}\overline{Y}$ R.E. Crochiere, S.A. Webber, J.L. Flanagan, "Digital Coding of Speech in Sub-bands", 1976, American Telephone and Telegraph Company, The Bell System Technical Journal, Vol. 55, No. 8, October 1976, pp. 1069-1085. ZZZ John W. Woods and Sean D. O'Neil, "Sub-band Coding of Images", Proceedings ICASSP 86, Tokyo, Japan, April 1986, pp. 1005-1008. "Proceedings: ICASSP 87", 1987 International Conference on Acoustics, Speech, and AAAA Signal Processing, April 6, 7, 8, 9, 1987, Volume 3 of 4, "Sub-band coding of Images Using Predictive Vector Quantization", P.H. Westernick, J. Biemond and D.E. Boekee, pp. 1378 -1381. Mark J.T. Smith and Thomas P. Barnwell, III, "Exact Reconstruction Techniques for Tree-**BBBB** Structured Subband Coders", IEEE Transactions on Acoustics, Speech, and Signal Processing, Vol. ASSP-34, No. 3, June 1986, p. 434-441. CCCC Marvin Vetterli, "Multi-Dimensional Sub-band coding: Some Theory and Algorithms", Signal Processing 6 (1984), pp. 97-112.

		لب
Examiner		
Signature	Date	
	Considered	- 1

H. Gharavi and Ali Tabatabai, "Sub-band coding of Digital Images Using Two-Dimensional

Quadrature Mirror Filtering", SPIE Vol. 707 Visual Communications and Image Processing,

OCT 3 1 2002

Technology Center 2600

"Proceedings: ICASSP 87", 1987 International Conference on Acoustics, Speech, and

Signal Processing, April 6,7,8,9, 1987, Volume 4 of 4, "Application of Quadrature Mirror Filtering to the Coding of Monochrome and Color Images", H. Gharavi and A. Tabataha pp. 2384-2387. International Search report for Application No. GB 9518298.6, dated November 1995.

DDDD

EEEE

FFFF

pp. 51-61.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents,

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.